

cable management **ACCESSORIES**

Spiralwrap provides necessary cable routing and protection when flexibility around corners and bends is desirable. Spiralwrap is a protective sheath which is wrapped around a group of cables to shield, organize and control it. Offered in many sizes and colors, Spiralwrap is very flexible and adaptable to any telecom closet, network or office environment.

CABLE MANAGEMENT ACCESSORIES

PICPAC

The PicPac offers an easy method of identifying binder system groups in PIC cable through the use of Hellermann-Tyton striped and solid cable ties. Each PicPac contains 1,300 ties, including 50 each of the 24 most popular color combinations of striped ties, as well as solid red and solid black ties. All 26 different ties are packaged in easy-open bags of 50.

PicPac cases are made from a heavy duty laminated vinyl which is suited to cold weather environments, resistant to cable gel, and can be cleaned inside and out. The reinforced pockets are interlined with foam cushion to ensure that ties remain tightly packed, even when only a few ties are left. Two convenient snaps allow the PicPac to be easily hung or folded.



HELLERMANN TYTON PART NO.	DESCRIPTION	PKG. QTY.
T18RPICPAC	Vinyl case containing 1,300 ties including 50 each of the 24 most popular color combinations of striped ties as well as solid black and solid red ties.	1

POCKETPAC

Designed to fit in a shirt pocket, the PocketPac contains 50 of the most commonly used striped cable ties. The Pocket-Pac case is made of clear vinyl with a snap-lock top for easy access and identification.



HELLERMANN TYTON PART NO.	DESCRIPTION	PKG. QTY.
T18RPOCKETPAC	Case containing 50 of the most commonly used striped ties (10 each of blue, orange, green, brown, and slate, all with white stripes).	1

CABLE MANAGEMENT ACCESSORIES



U.S. Patent Numbers 4,993,669 and 5,102,075

HellermannTyton's EI-Ty is a high strength strapping system used for supporting, securing, fastening, and spacing cable, as well as a variety of other applications requiring extra-long, extremely durable strapping.

The EI-Ty consists of a smooth strap and a separate, compact plastic head which encloses a stainless steel gripper. The stackable spacer works with the EI-Ty for a versatile, easy-to-install spacing system.

The EI-Ty has a minimum loop tensile strength of 250 pounds. The continuous operating temperature range is from -40° F to 185° F.

The EI-Ty complies with Bellcore Specification Reference TR-TSY-000789.

Materials: The EI-Ty strap and head are manufactured from black, acetal homopolymer with excellent dielectric properties, UV and chemical resistance, with a UL94-HB flame rating. It has been tested for excellent weatherability against moisture, sunlight and other environmental conditions.

STRAP

The strap's smooth edges combined with its excellent UV, chemical, and moisture resistance make the EI-Ty a safe, strong, and labor-saving method of strapping and spacing.

METAL PAWL

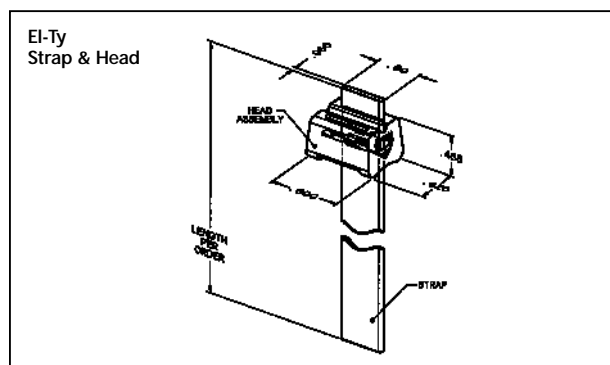
The corrosion resistant, stainless steel pawl is contained within the head. The pawl grips the strap in an area protected from damaging sunlight, resulting in long lasting, secure installations.

HEAD

The black, plastic head is injection molded with serrations on the outside for good gripping and ease of installation. This unique, serrated design helps prevent slippage and allows for easier pull through of the strap during installation. The head is contoured for uniform load distribution on the contact surface.

SPACER

HellermannTyton spacers for the EI-Ty easily press together and are stackable for most any desired spacing applications. Designed for versatility, the strap can be inserted from all four sides, accommodating multiple bundle diameters. Material: UV stabilized, black polypropylene with excellent weatherability and UV resistance.



HELLERMANN TYTON PART NO.	DESCRIPTION	PKG. QTY.
TELS-1	50 ft. of strap on reel dispenser and 30 heads.	1 Kit
TELS-H	Double entry, double locking heads.	25 Heads
TELS-13	10-13.5 in. of cable strap with 10 double locking heads.	10 Straps/Heads
TELS-27	10-27 in. of cable strap with 10 double locking heads.	10 Straps/Heads
TELS-5K	Kit containing 5 reels and 150 heads. Each reel dispenser contains 50 ft.	1 Kit
TELS-10K	Kit containing 10 reels and 300 heads. Each reel dispenser contains 50 ft.	1 Kit
TELS-SPK	Spacer designed for use with the EL-TY.	50
TELS-SPOOL	50 ft. reel	1 Reel

CABLE MANAGEMENT ACCESSORIES

AERIAL SUPPORT SPACER TIE

Aerial support spacer ties are one piece ties designed for standard spacing applications. These ties are pre-grouped in handy multiples of 5 to save installation time.

Materials: The strap is molded from special high impact nylon 6/6. The spacers are made from a high density outdoor black polypropylene. Both materials in this one piece tie offer resistance to sunlight, saltwater, and harsh chemical environments.



HELLERMANN TYTON PART NO.	MIN. TENSILE UNLOCKING STRENGTH	APPROX. LENGTH	APPROX. WIDTH	APPROX. MAX. DIAMETER	PKG. QTY.
TAS100RWS	100 lbs.	7.50"	.50"	1.75"	100
TAS100MWS	100 lbs.	10.00"	.50"	2.75"	100
TAS100LWS	100 lbs.	16.00"	.50"	4.50"	100



Place the spacer between the cable and strand. Wrap the tie strap around the cable and through the backside loop.



Pull the spacer snug to the cable and wrap the tie strap around the strand. Pass the tie strap through the locking buckle.



Electrician pliers may be used to snug the installation and snip tail.*

** As the cable and strand expand at different rates, the installation should not be tight but just snug.*

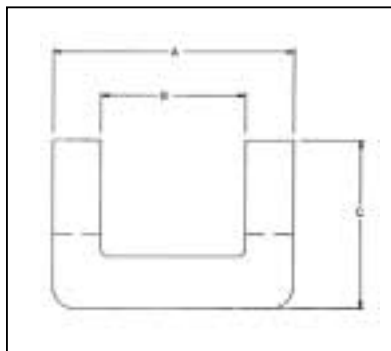
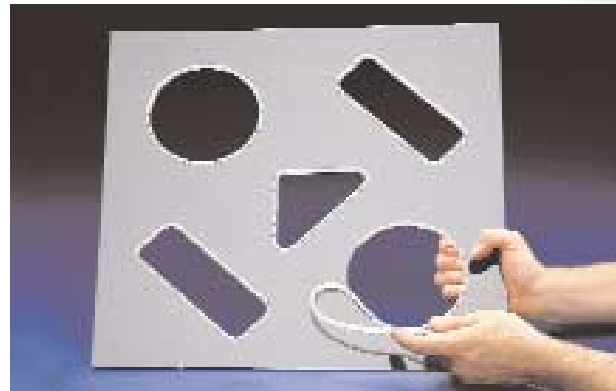


HellermannTyton aerial support spacer ties may be released by inserting a screwdriver under the locking ratchet of the buckle.

CABLE MANAGEMENT ACCESSORIES

GROMMET

HellermannTyton's Flexiform grommet is a unique, continuous wire protection product which fits easily in all shapes and sizes of holes without the aid of tools or adhesives. Since Flexiform can be cut to the right length with scissors, it eliminates waste, helping keep grommet stock to a minimum. HellermannTyton's Flexiform grommet can be used on any type of material including wood, steel, aluminum, plexiglass, and glass. It is available in 9 sizes for thicknesses from .016" to .512". The standard color is natural. Materials: polyethylene, nylon and P.T.F.E. (Teflon®).



STANDARD DIMENSIONS – IN. (MM)				
SIZE	WIDTH A	CHANNEL WIDTH B	HEIGHT C	RANGE OF THICKNESS
AA	.087 (2.21)	.037 (.94)	.094 (2.39)	.016-.035 (.41-.89)
A	.150 (3.81)	.055 (1.40)	.157 (4.00)	.016-.051 (.41-1.30)
B	.177 (4.50)	.091 (2.31)	.157 (4.00)	.051-.083 (1.30-2.11)
C	.220 (5.59)	.130 (3.30)	.157 (4.00)	.083-.130 (2.11-3.30)
D	.327 (8.31)	.197 (5.00)	.228 (5.79)	.130-.189 (3.30-4.80)
E	.386 (9.80)	.260 (6.60)	.240 (6.10)	.189-.256 (4.80-6.50)
F	.445 (11.30)	.319 (8.10)	.256 (6.50)	.256-.319 (6.50-8.10)
G	.512 (13.00)	.394 (10.01)	.256 (6.50)	.319-.382 (8.10-9.70)
H	.638 (16.21)	.512 (13.00)	.256 (6.50)	.382-.508 (9.70-12.90)

*All dimensions are subject to technical modification.
Size AA is available in polyethylene only.*

Part Number Examples

Material Type Size

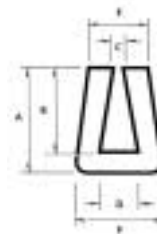
FP AA

When ordering, add size to the material reference.
For example, FPAA equals size AA in polyethylene material.

MATERIAL	REFERENCE	OPERATING TEMPERATURE	INTERMITTENT	PKG. QTY.
Polyethylene	FP_	-22°F (-30°C) to 176°F (80°C)	248PF (120PC)	One 82 foot (25 meter) reel
Nylon	FH_	-76°F (-60°C) to 203°F (95°C)	266PF (130PC)	One 82 foot (25 meter) reel
P.T.F.E. (Teflon®)	FT_	-76°F (-60°C) to 500°F (260°C)	662PF (350PC)	One 9.7 foot (3 meter) reel

The operating temperatures shown above are dependent upon the environment application.

HellermannTyton's Flexiform grommet is also manufactured from a self extinguishing UL94V-0 rated flexible PVC compound which ensures flexibility and ease of application. Perfect for use on HellermannTyton's wiring duct, this grommet eliminates sharp edges left by removing "fingers" from the sides of the duct.



STANDARD DIMENSIONS – IN. (MM)					
A	B	C	D	E	F
.252 (6.40)	.196 (1.98)	.040 (1.02)	.072 (1.83)	.168 (4.27)	.200 (5.08)

HELLERMANN TYTON PART NO.	MATERIAL	PANEL THICKNESS RANGE – IN. (MM)	OPERATING TEMPERATURE	FLAMMABILITY	COLOR	PKG. QTY.
SM1BK30MT	PVC	.040"-.072" (1.02mm-1.83mm)	-149°F to 221°F (-65°C to 105°C) 266°F (130°C) Intermittent	Self-extinguishing UL94V-0	Black	One 98.5 foot (30 meter) reel

CABLE MANAGEMENT ACCESSORIES

CONVOLUTED TUBING

Convoluted tubing provides an efficient method of routing and protecting wire and cable, while reducing the chance of installation damage.

HellermannTyton's convoluted tubing offers excellent protection against vibration wear, water, snow, ice, and the effects of heat, cold, and sunlight on cables and wires.

NEW



Convoluted Tubing Dimensions

SIZE	I.D. – IN. A	O.D. – IN. B	WALL THICKNESS MIN.
1/4"	.236/.264	.376/.400	.004
3/8"	.344/.374	.489/.519	.006
1/2"	.479/.509	.660/.690	.007
5/8"	.603/.633	.805/.840	.007
3/4"	.720/.755	.953/.988	.007
1"	1.008/1.048	1.288/1.328	.009
1-1/4"	1.245/1.295	1.414/1.465	.009
1-1/2"	1.555/1.605	1.853/1.903	.009
2"	1.980/2.035	2.343/2.409	.009

Convoluted Tubing Materials

MATERIAL	COLOR	OPERATING RANGE
Polyethylene	Black	-40°F Min. 200°F Max.
Nylon	Black with Gray Stripe	-40°F Min. 300°F Max.
Flame Retardant Polyethylene*	Gray	-40°F Min. 200°F Max.
Flame Retardant Polypropylene*	Blue/Green Black with Gray stripe	-40°F Min. 275°F Max.
Heat Stabilized Polypropylene*	Black with Green Stripe	-40°F Min. 275°F Max.

* Available upon request. Custom terms apply.

CABLE MANAGEMENT ACCESSORIES

Convolved Tubing

HELLERMANN TYTON PART NO.	DESCRIPTION	PKG. QTY.
Polyethylene		
CTP140STD	1/4" Black Polyethylene – Standard Carton	3,200'
CTP140	1/4" Black Polyethylene – Bulk Carton	25,000'
CTP380STD	3/8" Black Polyethylene – Standard Carton	1,900'
CTP380	3/8" Black Polyethylene – Bulk Carton	15,000'
CTP120STD	1/2" Black Polyethylene – Standard Carton	1,100'
CTP120	1/2" Black Polyethylene – Bulk Carton	8,500'
CTP580STD	5/8" Black Polyethylene – Standard Carton	800'
CTP580	5/8" Black Polyethylene – Bulk Carton	5,500'
CTP340STD	3/4" Black Polyethylene – Standard Carton	550'
CTP340	3/4" Black Polyethylene – Bulk Carton	4,200'
CTP10STD	1" Black Polyethylene – Standard Carton	300'
CTP10	1" Black Polyethylene – Bulk Carton	2,250'
CTP1140STD	1-1/4" Black Polyethylene – Standard Carton	250'
CTP1140	1-1/4" Black Polyethylene – Bulk Carton	1,800'
CTP1120STD	1-1/2" Black Polyethylene – Standard Carton	150'
CTP1120	1-1/2" Black Polyethylene – Bulk Carton	1,000'
CTP20STD	2" Black Polyethylene – Standard Carton	100'
CTP20	2" Black Polyethylene – Bulk Carton	700'
Nylon		
CTN140STD	1/4" Black Nylon – w/ Gray Stripe – Standard Carton	3,200'
CTN140	1/4" Black Nylon – w/ Gray Stripe – Bulk Carton	28,000'
CTN380STD	3/8" Black Nylon – w/ Gray Stripe – Standard Carton	1,900'
CTN380	3/8" Black Nylon – w/ Gray Stripe – Bulk Carton	15,000'
CTN120STD	1/2" Black Nylon – w/ Gray Stripe – Standard Carton	1,100'
CTN120	1/2" Black Nylon – w/ Gray Stripe – Bulk Carton	8,500'
CTN580STD	5/8" Black Nylon – w/ Gray Stripe – Standard Carton	800'
CTN580	5/8" Black Nylon – w/ Gray Stripe – Bulk Carton	5,500'
CTN340STD	3/4" Black Nylon – w/ Gray Stripe – Standard Carton	550'
CTN340	3/4" Black Nylon – w/ Gray Stripe – Bulk Carton	4,200'
CTN10STD	1" Black Nylon – w/ Gray Stripe – Standard Carton	300'
CTN10	1" Black Nylon – w/ Gray Stripe – Bulk Carton	2,250'
CTN1140STD	1-1/4" Black Nylon – w/ Gray Stripe – Standard Carton	250'
CTN1140	1-1/4" Black Nylon – w/ Gray Stripe – Bulk Carton	1,800'
CTN1120STD	1-1/2" Black Nylon – w/ Gray Stripe – Standard Carton	150'
CTN1120	1-1/2" Black Nylon – w/ Gray Stripe – Bulk Carton	1,000'
CTN20STD	2" Black Nylon – w/ Gray Stripe – Standard Carton	100'
CTN20	2" Black Nylon – w/ Gray Stripe – Bulk Carton	700'

Standard tubing is slit. Unslit is available upon request.
Please contact HellermannTyton for pre-cut length requirements.
Colors are available dependent upon volume requirements.

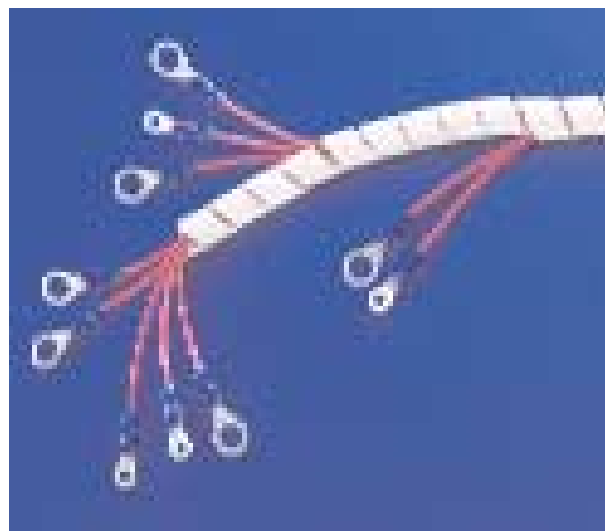
Turn page for material specifications.

CABLE MANAGEMENT ACCESSORIES



SPIRALWRAP

Designed to be wrapped around a group of cables, Spiralwrap is ideal for shielding, organizing and controlling bundles. This protective sheathing also allows for flexible routing and lead-out of wire and cable. Offered in many sizes and colors, Spiralwrap is reusable and adaptable to any telecom closet, network or office environment. Helps to maintain minimum bend radius requirements for wires.



INSTALLATION

Spiralwrap can be installed in two basic ways:

In a gapped installation, Spiralwrap is wrapped with space between the sheathing. This accommodates wire breakouts and also keeps the wire bundle flexible.

In a butted installation, Spiralwrap is wrapped so the sheathing completely insulates the wire bundle. This provides superior abrasion resistance and additional rigidity.

COLOR* NON-FLAME RETARDANT POLYETHYLENE	SIZE					
	1/8"	1/4"	3/8"	1/2"	3/4"	1"
HT SIZE CODE	1	2	2.5	3	4	5
Natural (9)	X	X	X	X	X	X
Black (0)	X	X	X	X	X	X
Brown (1)	X	X		X		
Red (2)	X	X	X	X	X	X
Orange (3)	X		X			
Yellow (4)	X	X	X	X	X	X
Green (5)	X	X	X			
Blue (6)	X	X	X	X	X	X
Purple (7)	X		X			
Gray (8)						
White (10)	X	X	X	X	X	X
Pink (15)			X			
DG Orange (DG3)	X	X	X	X	X	X
DG Yellow (DG4)			X			
DG Green (DG5)						
Glow in the Dark (DG9)			X			
DG Pink (DG15)		X	X			

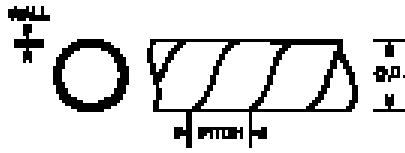
*All size/color combinations denoted with an "X" in the table above are available upon request. Contact HellermannTyton for pricing, part numbers, and lead times. Additional size/color combinations may be available upon request. Contact your local HellermannTyton representative for pricing and minimums.

Part Number Examples

3 | NFP | 9 | C
 Size | Material | Color | Qty.
 (See Chart) | | | (C=100 ft.)

When ordering, add size to the material reference.
For example, 3NFP9C equals 1/2" natural polyethylene in 100 ft. rolls.

CABLE MANAGEMENT ACCESSORIES



HELLERMANN TYTON PART NO.	MATERIALS	OUTSIDE DIAMETER		NOMINAL DIMENSIONS WALL		PITCH		MAXIMUM BUNDLE RANGE		WEIGHT	PKG. QTY.
		Inches	Millimeters	Inches	Millimeters	Inches	Millimeters	Inches	Millimeters	X ft.	
1NFP9C	Non-Flame Retardant Polyethylene (Ref. NFP)	.125	(3.18)	.032	(.81)	.187	(4.75)	1/16 to 1/2	(1.60 to 12.7)	4	One 100' Reel
2NFP9C		.250	(6.35)	.045	(1.14)	.375	(9.53)	3/16 to 2	(4.75 to 50.8)	12	
2.5NFP9C		.375	(9.53)	.052	(1.32)	.438	(11.13)	5/16 to 3	(7.92 to 76.2)	22	
3NFP9C		.500	(12.70)	.062	(1.57)	.563	(14.30)	3/8 to 4	(9.52 to 102)	35	
4NFP9C		.750	(19.05)	.065	(1.65)	.750	(19.05)	3/4 to 5	(19.10 to 127)	58	
5NFP9C		1.000	(25.40)	.095	(2.41)	1.000	(25.40)	1 to 7	(25.40 to 178)	105	
1NFP0C	Black Non-Flame Retardant Polyethylene (Ref. NFP0)	.125	(3.18)	.032	(.81)	.187	(4.75)	1/16 to 1/2	(1.60 to 12.7)	4	One 100' Reel
2NFP0C		.250	(6.35)	.045	(1.14)	.375	(9.53)	3/16 to 2	(4.75 to 50.8)	12	
2.5NFP0C		.375	(9.53)	.052	(1.32)	.438	(11.13)	5/16 to 3	(7.92 to 76.2)	22	
3NFP0C		.500	(12.70)	.062	(1.57)	.500	(12.70)	3/8 to 4	(9.52 to 102)	35	
4NFP0C		.750	(19.05)	.065	(1.65)	.750	(19.05)	3/4 to 5	(19.10 to 127)	58	
5NFP0C		1.000	(25.40)	.095	(2.41)	1.000	(25.40)	1 to 7	(25.40 to 178)	105	
1FRP9C	Flame Retardant Polyethylene (Ref. NFP0) Natural material is white.	.125	(3.18)	.032	(.81)	.187	(4.75)	1/16 to 1/2	(1.60 to 12.7)	6	One 100' Reel
2FRP9C		.250	(6.35)	.045	(1.14)	.375	(9.53)	3/16 to 2	(4.75 to 50.8)	17	
2.5FRP9C		.375	(9.53)	.052	(1.32)	.438	(11.13)	5/16 to 3	(7.92 to 76.2)	29	
3FRP9C		.500	(12.70)	.062	(1.57)	.563	(14.30)	3/8 to 4	(9.52 to 102)	52	
4FRP9C		.750	(19.05)	.065	(1.65)	.750	(19.05)	3/4 to 5	(19.10 to 127)	85	
5FRP9C		1.000	(25.40)	.095	(2.41)	1.000	(25.40)	1 to 7	(25.40 to 178)	156	
1FRP0C	Black Flame Retardant Polyethylene (Ref. FRP0)	.125	(3.18)	.032	(.81)	.187	(4.75)	1/16 to 1/2	(1.60 to 12.7)	6	One 100' Reel
2FRP0C		.250	(6.35)	.045	(1.14)	.375	(9.53)	3/16 to 2	(4.75 to 50.8)	17	
2.5FRP0C		.375	(9.53)	.052	(1.32)	.438	(11.13)	5/16 to 3	(7.92 to 76.2)	29	
3FRP0C		.500	(12.70)	.062	(1.57)	.563	(14.30)	3/8 to 4	(9.52 to 102)	52	
4FRP0C		.750	(19.05)	.065	(1.65)	.750	(19.05)	3/4 to 5	(19.10 to 127)	85	
5FRP0C		1.000	(25.40)	.095	(2.41)	1.000	(25.40)	1 to 7	(25.40 to 178)	156	
1N9C	Nylon (Ref. N)	.125	(3.18)	.015	(.38)	.187	(4.75)	1/16 to 1/2	(1.60 to 12.7)	3	One 100' Reel
2N9C		.250	(6.35)	.025	(.64)	.375	(9.53)	3/16 to 2	(4.75 to 50.8)	9	
2.5N9C		.375	(9.53)	.035	(.89)	.438	(11.13)	5/16 to 3	(7.92 to 76.2)	18	
3N9C		.500	(12.70)	.035	(.89)	.500	(12.70)	3/8 to 4	(9.52 to 102)	25	
4N9C		.750	(19.05)	.032	(.81)	.750	(19.05)	1/2 to 5	(12.70 to 127)	38	
5N9C		1.000	(25.40)	.032	(.81)	1.000	(25.40)	1 to 7	(25.40 to 178)	50	
1NOC	Black Nylon (Ref. N0)	.125	(3.18)	.015	(.38)	.187	(4.75)	1/16 to 1/2	(1.60 to 12.7)	3	One 100' Reel
2NOC		.250	(6.35)	.025	(.64)	.375	(9.53)	3/16 to 2	(4.75 to 50.8)	9	
2.5NOC		.375	(9.53)	.035	(.89)	.438	(11.13)	5/16 to 3	(7.92 to 76.2)	18	
3NOC		.500	(12.70)	.035	(.89)	.500	(12.70)	3/8 to 4	(9.52 to 102)	25	
4NOC		.750	(19.05)	.032	(.81)	.750	(19.05)	1/2 to 5	(12.70 to 127)	38	
5NOC		1.000	(25.40)	.032	(.81)	1.000	(25.40)	1 to 7	(25.40 to 178)	50	
1P9C	P.T.F.E. – Teflon* (Ref. P)	.125	(3.18)	.030	(.76)	.187	(4.75)	1/16 to 1/2	(1.60 to 12.7)	9.4	One 100' Reel
2P9C		.250	(6.35)	.030	(.76)	.375	(9.53)	3/16 to 2	(4.75 to 50.8)	20.7	
2.5P9C		.375	(9.53)	.030	(.76)	.438	(11.13)	5/16 to 2-1/2	(7.92 to 63.5)	36.5	
3P9C		.500	(12.70)	.030	(.76)	.500	(12.70)	3/8 to 3	(9.52 to 76.2)	50.5	
4P9C		.750	(19.05)	.032	(.81)	.750	(19.05)	1/2 to 4	(12.70 to 102)	81.3	
5P9C		1.000	(25.40)	.040	(1.02)	1.000	(25.40)	3/4 to 5	(19.10 to 127)	175.0	

*Teflon is a DuPont Trademark.

CABLE MANAGEMENT ACCESSORIES

Spiralwrap Material Specifications

MATERIAL	TECHNICAL DATA	ENVIRONMENTAL RESISTANCE	DESCRIPTION	AGENCY APPROVALS
NFP Non-Flame Resistant Polyethylene	Temp. Range: -105°F (40.6°C) to 215°F (101.7°C) Abrasion Resistance: 22 mg/1,000 cycles (Lower Numbers better) Dielectric Constant: 2.50 Ten. Strength @ 73°F (22.8°C)(D638-52T*): -- Ten. Strength @ 73°F (22.8°C)(D412-51T*): 1,800 psi Specific Gravity (D792-66*): 0.92 Water Absorption (D-570*): 0.014%	Flammability: Flammable Solvent Effect: None below 122°F (50°C) Acid Effect: None Alkalis Effect: None	Polyethylene is ideal for general applications that are not affected by ordinary solvents. Available in colors.	Fed. Spec LP390 MIL I-631D MIL P-21922B
NFPO Black Non-Flame Resistant Polyethylene	Temp. Range: -105°F (40.6°C) to 215°F (101.7°C) Abrasion Resistance: 20 mg/1,000 cycles (Lower Numbers better) Dielectric Constant: 2.60 Ten. Strength @ 73°F (22.8°C)(D638-52T*): -- Ten. Strength @ 73°F (22.8°C)(D412-51T*): 2,000 psi Specific Gravity (D792-66*): 0.93 Water Absorption (D-570*): 0.030%	Flammability: Flammable Solvent Effect: None below 122°F (50°C) Acid Effect: None Alkalis Effect: None	Ultraviolet resistant for outdoor use. Has the same qualities as clear polyethylene, but also contains an ultraviolet absorber which permits it to be used in direct sunlight for long periods of time. Available by special order in gray.	Fed. Spec LP390 MIL I-631D MIL P-21922B
FRP9 & FRPO Flame Resistant Polyethylene (Rulan)	Temp. Range: -1°F (-18.3°C) to +200°F (93.3°C) Abrasion Resistance: 27 mg/1,000 cycles (Lower Numbers better) Dielectric Constant: 2.58 Ten. Strength @ 73°F (22.8°C)(D638-52T*): 1,300 psi Ten. Strength @ 73°F (22.8°C)(D412-51T*): 1,400 psi Specific Gravity (D792-66*): 1.29 Water Absorption (D-570*): 0.020%	Flammability: UL94-V0 Solvent Effect: None below 122°F (50°C) Acid Effect: None Alkalis Effect: None	Suitable for applications requiring a self-extinguishing material. Lower cost than nylon or Teflon materials. Note: Natural color is milky white.	
N9 Natural Nylon	Temp. Range: -121°F (-85°C) to +200°F (93.3°C) Abrasion Resistance: 6-8 mg/1,000 cycles (Lower Numbers better) Dielectric Constant: 4.00 Ten. Strength @ 73°F (22.8°C)(D638-52T*): 12,000 psi Ten. Strength @ 73°F (22.8°C)(D412-51T*): -- Specific Gravity (D792-66*): 1.14 Water Absorption (D-570*): 1.500%	Flammability: UL94-V2 Solvent Effect: None Acid Effect: Satisfactory except for strong acids Alkalis Effect: None	Recommended for use in enclosed environments where the possibility of fire exists. Self-extinguishing. Does not produce any toxic or irritation byproducts, even when exposed to open flame or excessive temperatures. Nylon is six times as strong as polyethylene.	MIL I-20693B Type I MIL M-22096A Fed. Spec LP 410A MIL M-19098
N0 Black Nylon	Temp. Range: -121°F (-85°C) to +200°F (93.3°C) Abrasion Resistance: 6-8 mg/1,000 cycles (Lower Numbers better) Dielectric Constant: 4.00 Ten. Strength @ 73°F (22.8°C)(D638-52T*): 12,000 psi Ten. Strength @ 73°F (22.8°C)(D412-51T*): -- Specific Gravity (D792-66*): 1.14 Water Absorption (D-570*): 1.500%	Flammability: UL94-V2 Solvent Effect: None Acid Effect: Satisfactory except for strong acids Alkalis Effect: None	Black nylon features the same properties as natural nylon with the added benefit of an ultraviolet absorber so that it can be used in direct sunlight for long periods of time.	MIL I-20693A Type II MIL M-22096 Fed. Spec LP 410A MIL T-47287A Type II AS1294
P9 Natural Teflon (PTFE)	Temp. Range: -450°F (-267°C) to +500°F (260°C) Abrasion Resistance: 7 mg/1,000 cycles (Lower Numbers better) Dielectric Constant: 2.10 Ten. Strength @ 73°F (22.8°C)(D638-52T*): 3,000 psi Ten. Strength @ 73°F (22.8°C)(D412-51T*): -- Specific Gravity (D792-66*): 2.10 Water Absorption (D-570*): 0.005%	Flammability: Non-Flammable Solvent Effect: None Acid Effect: None Alkalis Effect: None	Teflon offers the widest operating temperature range of any material and can be used from -450°F (-267°C) to +500°F (260°C). Chemically inert and not flammable. Available with special order in black or colors.	AMS 3651C AMS 3653C AMS 3654, 3655 ASTM D3295 MIL I-22129C MIL P-22296B MIL T-47287A Type I

* ASTM Standard